

## SR870BH2 PR02.0 BIOS (MTC) Release notes

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ID: S870BH2A.86B.0253.P02.0609271109

### Components/Contents

BIOS	0253.PR2* (Production Release 2.0 for Itanium® 2 Processor 9000 Series)
PAL	8.30*
SAL-A/SAL-B	3.0/3.0 (SAL3.20 spec update changes)
FPSWA	1.18
EFI	1.10.14.62
EFI GIGUNDI	2.16
SCSI BIOS (LSI1030)	01.03.10
ATI BIOS	0101145700000112

(\* indicates new for this release)

### System configuration supported

Gold system with Itanium® 2 Processor 9000 Series

### Special Instructions

#### UPGRADING TO ITANIUM® 2 PROCESSOR 9000 SERIES

To upgrade to Itanium® 2 Processor 9000 Series, follow the instructions in Technical Advisory TA 789.

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#### USE LATEST VERSION OF IFLASH64.EFI

To eliminate the chance of flashing incompatible BIOS binary, please use IFLASH64.efi Version 1.03 or greater. Starting with Version 1.03, Iflash64.efi is capable of verifying that the selected BIOS binary is compatible with the system's Processors type, by matching the Processor's CPUID. If incapability is detected, then an error message is displayed. Refer IFLASH64.EFI Ver1.03 Release notes for details.

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#### USING THE BIOS CD IMAGE TO CREATE BIOS RECOVERY-CD

As the systems have only the IDE-CD as the recovery media device, this BIOS release includes a bootable (El-Torito) CD-image file. This CD image can be burned into blank CD-R or CD-RW media to create the BIOS recovery-CD. To recover BIOS from the CD, put the BIOS recovery-CD into the IDE-CD drive and set the recovery jumper and reset the system, the BIOS recovery will start.

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## OTHER INSTRUCTIONS:

1. CLEAR CMOS! after updating to this BIOS.
2. Preferably clear the Processor history, by going to the Setup and issuing a Re-arm.
3. This Bios will detect mismatched DIMMs and incorrect SPD data on DIMMs. Check and replace DIMMs with incorrect SPD data. A faulty DIMM in any row, will cause subject row to be mapped out. In case of systems with only single Row populated, a bad DIMM will prevent it from booting, since no Memory is detected because of the faulty Row.
4. This Bios allows BMC to program the Core-Ratio for the Processor speed.
5. See NOTE below for flash upgrade and jumper definitions
6. In case Recovery is required on the system, it will be done from the IDE-DVD/CD-ROM drive.

### Known Issues/Workarounds

- Itanium® 2 Processor with up to 6MB L3 cache cannot directly recover to Itanium® 2 Processor 9000 Series. You must first recover to Itanium® 2 Processor with up to 9MB L3 cache, then follow the standard recovery procedure with transition BIOS to Itanium® 2 Processor 9000 Series. Please use the transition BIOS released along with the Beta 3 BIOS for Itanium® 2 Processor 9000 Series.

### Change History

#### Changes in PR2.0

- PAL 8.30 related changes
- Sighting 88700 – C2 system hangs noticed on PRQ PALs

#### Changes in PR1.4 or before

- PAL 7.46, 7.44, 7.43, 7.33 related changes
- ASSERT FAILED error when copy certain file using USB FDD
- CPU quantity incorrect display in W2k3 "Device Manager"
- W2K3 Device Manager only detect 2 processors when 2 QPAL
- Power off the system will cause WHQL test error
- SMBIOS cache entries present and enabled for empty proc sockets
- DIG64 SAL test hangs on SR870BH2 with RC1 BIOS and Itanium® 2 Processor 9000 Series C1 Procs
- Hurdle test hangs at "testing SAL"
- Wrong value for BogomIPS in Linux /proc/cpuinfo on Itanium® 2 Processor 9000 Series
- "Multi-threading" in BIOS setup must be changed to "Hyper-Threading Technology"
- Windows Blue Screens with Four 1.4GHz 12M Processors Installed.
- SMBIOS cache entries present and enabled for empty proc sockets.

- System won't boot with 2x Single Core Monte. Procs. installed.
- Pressing Reset on SR870BH2 with Itanium® 2 Processor 9000 Series causes repetitive power cycling.
- Added support for HPC Processors (removed MT option, fixed cache display)
- EBC fix for Emulex, Qlogic EFI configuration utility hang issue.
- "Proc speed mismatch" error occurs with other errors.
- SMBIOS type 11 (OEM String) not properly terminated, has garbage characters.
- Different speed DIMM do not cause mismatch
- Lexar 256MB USB2.0 Keyfob does not work in EFI
- System hangs and doesn't log error when dSERR is injected
- Updated Multi-threading feature so power cycle not needed when going from disabled to enabled.
- Localization for Multi-threading and Multi-threading Help.
- Processor speed incorrect in Type 4 SMBIOS Structure.
- Duplication keyboard instructions for "Enter" in BIOS Setup.
- Extraneous BIOS Setup keyboard instructions in Processor Info sub-menus.
- BIOS Setup screen delays display.
- Missing keyboard instructions for right arrow key in BIOS Setup.
- Serial Redirection over Modem fails on SR870BH2 with Itanium® 2 Processor 9000 Series.
- Quiet boot stays enabled when Service Partition Boot is enabled.
- Removed FFM BIOS setup option
- Itanium® 2 Processor 9000 Series BIOS Setup items don't reset to default when NVRAM is cleared by DIP

#### Standard Feature list/Notes

- Standards specifications
  - ACPI 2.0
  - PCI 2.2
  - DIG64
  - PMM 1.01
  - PCI 2.2
  - SMBIOS 2.3.1
  - WFM 2.0 (PXE support)
  - PnP 1.0A
  - EDD 3.0
- Standard SAL/PAL/Legacy BIOS support
- EFI 1.1 (build 1461) support
  - USB 1.1 Keyboard, Mouse and Mass storage (only ATAPI) devices
  - UNDI, UGA driver support
  - Boot Manager & Maintenance
  - EFI Shell

- MCA & Error handling
- 128MB, 256MB, 512MB, 1GB and 2GB DDR DIMMs
- Memory (faulty DIMMs) map-out and error reporting/logging
- BIOS update (iFlash64) and Recovery
- Server Management (BMC) FRBs, FRU, Event logging and etc
- Console redirection
- BIOS setup & localization
- User binary
- OEM Logo